

## ABSTRACT

A non-toxic and effective isoflavone radioprotective agent for treating or preventing effects and damage due to radiation exposure, or increasing the survivability to a lethal dose of radiation. The isoflavone can be administered orally, subcutaneously, intramuscularly, intravenously, transdermally, intranasally, or rectally. The isoflavone is administered chronically, and/or before, during and/or after radiation exposure. These radioprotective agents can be used to protect personnel exposed to radioactive substances.